

ABSTRACT

A roofing membrane which exhibits improved properties, particularly reduced propensity to blister, is produced by selecting a the group consisting of straight run asphalts with a rod & ball softening point in the range of from 80 to 130 degrees F; oxidized asphalts, solvent washed asphalts, road tars, refined tars, and blends thereof; selecting a modifying polymer from a group consisting of: styrene-butadiene-styrene ("SBS") block co-polymer, atactic polypropylene ("APP"), and a combination of SBS and APP; modifying the bitumen by adding the polymer while the bitumen is in a molten state in a sealed mixing vessel; exposing the modified bitumen to a pressure less than ambient during or after modification while still in a molten state to allow release of entrained gases; and forming the roofing membrane from the molten modified bitumen.